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FOREST PRODUCTS RESEARCH IN PICTURES

NO. 67

PAINTED WOOD RESISTS WEATHERING



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The unfriendly wording of this old wooden sign, originally painted in red on what was a smooth surface, stands out in relief because the background unprotected by paint has weathered away. Microscopic examination of the wood at the Forest Products Laboratory showed that rot organisms were not responsible for its disintegration.

Only when wood is allowed to remain damp for long periods are decay organisms likely to rot it. When it is subjected to ordinary wettings and dryings of the exposed surfaces it is more apt to weather. Weathering is the "raising of the grain," checking, cracking, splitting, warping, tearing loose from fastenings, and gradual disintegration of wood due to stresses set up in the piece by its swelling and shrinking with the alternation of rain and sunshine. It also includes any mechanical wear which may result from wind, rain, frost, hail and similar causes.

Paint is not, as many think, completely impermeable to moisture and rot fungi. Neither does it stop the growth of fungi already in wood. It is, however, the best known protection against weathering because it retards the absorption of moisture sufficiently to spare the surface of the wood the extreme and rapid variations in moisture content which cause deterioration of the sort shown here.

Photograph by Forest Products Laboratory, U. S. Forest Service



